In the Claims:

Please enter the following amended claim set:

1.   (currently amended)   A device for generating a three-dimensional image of an object (9) which that is subject to a cyclic movement, comprising an imaging device [[(1)]] to generate projection pictures (P_{i-1}, P_i, P_{i+1}, P_j, P_k, P_l) of the object from various projection directions and a data processing device [[(7)]] coupled to [[this]] the imaging device for reconstruction of a three-dimensional image of the object from said projection pictures, wherein the data processing device [[(7)]] is designed to use for reconstruction of reconstruct the three-dimensional image by determining projection lines (l_{i-1}, l_i, l_{i+1}, l_j, l_k, l_l) of a characteristic object feature, and using for the reconstruction only those projection pictures (P_i, P_k, P_l) for which the projection lines (l_i, l_k, l_l) of [[a]] the characteristic object feature intersect approximately in the same at a common spatial point (r_0) and to omit from use in the reconstruction those projection pictures (P_{i-1}, P_{i+1}, P_j) having projection lines (l_{i-1}, l_{i+1}, l_j) of the characteristic object feature that do not intersect approximately at the common spatial point r_0.

2.   (currently amended)   A device as claimed in claim 1, characterized in that wherein the imaging device is an X-ray device [[(1)]] with an X-ray source [[(2)]] and an X-ray detector [[(5)]] which are mounted rotatable about a common axis.

3

3.   (currently amended)   A device as claimed in claim 1, ~~characterized in that it comprises~~ further comprising a display device [[(8)]] coupled with the data processing device [[(7)]] to display the reconstructed three-dimensional image.

4.   (currently amended)   A device as claimed in claim 1, ~~characterized in that~~ wherein the characteristic object feature [[is]] comprises a marker on the object~~, in particular a catheter or stent~~.

5.   (currently amended)   A device as claimed in claim 1, ~~characterized in that~~ wherein the characteristic object feature [[is]] comprises a branch point (r_0) of an object structure ~~in particular a vessel~~.

6.   (currently amended)   A device as claimed in claim 1 [[where]] wherein the data processing device [[(7)]] is designed:

      a)   to select from a number of [[a]] projection pictures (P_i, P_j, P_k, P_l) a first projection picture (P_i);

      b)   for said first projection picture (P_i) to select a second projection picture (P_k) taken from another projection direction such that the projection lines (l_i, l_k) of [[a]] the characteristic object feature for both projection pictures (P_i, P_k) intersect at least approximately at [[a]] the spatial point (r_0);

4

c)   to select further projection pictures (P_i) for the reconstruction of the three-dimensional image such that the associated projection lines (l_i) of the characteristic object feature run approximately through said spatial point (r_0).

7.   (currently amended)   A device as claimed in claim 6, ~~characterized in that~~ wherein the projection direction of the second projection picture (P_k) lies approximately at an angle (a) of 90° to the projection direction of the first projection picture (P_i).

8.   (currently amended)   A method for generating a three-dimensional image of an object ~~(9) which~~ that is subject to a cyclic movement, comprising ~~the steps of~~:

a)   ~~generation of~~ generating a number of projection pictures (P_{i-1}, P_i, P_{i+1}, P_j, P_k, P_l) of the object [[(9)]] from various spatial directions;

b)   <u>determining projection lines (l_{i-1}, l_i, l_{i+1}, l_j, l_k, l_l) of a characteristic object feature;</u>

<u>c)</u>   ~~selection of~~ selecting projection pictures (P_i, P_k, P_l) for which the projection lines (l_i, l_k, l_l) of a characteristic object feature intersect approximately at the same spatial point (r_0); <u>and</u>

[[c]] <u>d)</u> ~~reconstruction of~~ reconstructing the three-dimensional image from the projection pictures selected in ~~step b)~~ <u>c), omitting from the reconstruction those</u>

projection pictures (P_{i-1}, P_{i+1}, P_j) having projection lines (l_{i-1}, l_{i+1}, l_j) of the characteristic object feature that do not intersect at approximately the same spatial point r_0.

9.   (currently amended)   A method as claimed in claim 8, ~~characterized in that~~ wherein the projection pictures (P_{i-1}, P_i, P_{i+1}, P_j, P_k, P_l) are generated by X-ray projection of an object [[(9)]], and wherein the projection centers (S_i, S_j, S_k, S_l) are distributed approximately on a circle arc about the object.

10.   (currently amended)   A method as claimed in claim 8, ~~characterized in that~~ further comprising showing the reconstructed three-dimensional image ~~is shown~~ on a display device [[(8)]].

11.   (new) A device as claimed in claim 2, wherein the characteristic object feature comprises an object that is at least partially impervious to X rays.

12.   (new) A device as claimed in claim 4, wherein the marker comprises at least one of a catheter and a stent.

13.   (new) A device as claimed in claim 5, wherein the object structure comprises a vessel.

14.   (new) A device as claimed in claim 6, wherein the projection direction of the second projection picture (P_k) lies approximately at an angle (a) in a range of 70-110° to the projection direction of the first projection picture (P_i).

15.   (new) A method as claimed in claim 9, wherein the arc extends over a range ≥180°.

16.   (new) A system for generating a three-dimensional image of a cyclically moving object from a plurality of projection pictures of the object collected from a plurality of different projection directions, the system comprising a processor programmed with code segments adapted to:

receive data representative of at least some of the plurality of projection pictures;

select a first projection picture from among the plurality of projection pictures;

identify a first projection line from a source in a first position through a located object feature to the first projection picture;

identify a second projection picture from among the plurality of projection pictures;

identify a second projection line from the source in a second position through the object feature to the second projection picture; and

use at least some of the projection pictures having projection lines extending through the object feature to generate a three-dimensional image of the object, omitting from use in the image generation those projection pictures having projection lines that do not intersect the object feature.

17.   The system as claimed in claim 16, wherein the processor is programmed with a further code segment adapted to transmit the generated three-dimensional image to a display.

18.   The system as claimed in claim 16, wherein the processor is programmed with a further code segment adapted to locate the object feature by means of image processing.

19.   The system as claimed in claim 16, wherein the processor is programmed with a further code segment adapted to receive a location of the object feature from a user.